

Capacity building/development and academic research: an experience through InterRidge and beyond

Jérôme Dymont

InterRidge Chair, CNRS and Institut de
Physique du Globe de Paris

InterRidge: Membership in 2020

Institutional

Principal members (25k USD):

China
France
Korea (host – double contribution)
Norway

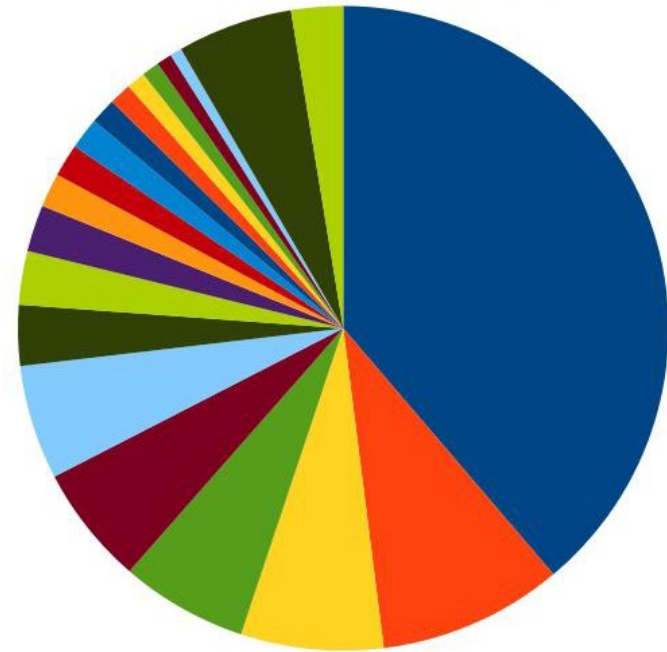
Regular members (5k USD):

Canada
Germany
India
Italy
Japan
United Kingdom

Corresponding members :

Australia, Brasil, Chile, Mauritius, New Zealand, Philippines, Poland, Portugal, Russia, South Africa, United States of America

Mailing list



based on interridge-members list of 1708 records



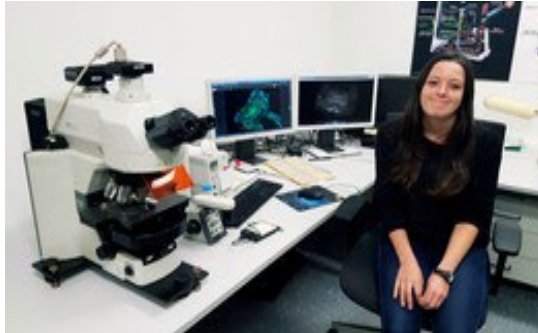
InterRidge: Activity in 2019

- ***Lead the Science on Mid-ocean Ridges and the Deep Seafloor***
community → Working Groups → Workshops → Reports → community
3 Workshops and 1 Theoretical Institute in 2019
- ***Speak for Scientists to the Public, Policy Makers, International Agencies...***
ISA, SCOR
Code of Conduct for responsible research at hydrothermal vent
- ***Disseminate information***
InterRidge Vent Database
- ***Promote early-career scientists***
InterRidge Fellowships and Cruise Bursaries
2 Fellowships and 3 bursaries in 2019

***InterRidge* actions for early-career scientists:**

InterRidge Student and Postdoctoral Fellowship Program promotes the involvement of young scientists in international, collaborative, and interdisciplinary studies of oceanic spreading centers.

Fellowships are designed to encourage international collaboration on any aspect of ridge-crest science by graduate students or postdoctoral researchers, fostering long-standing partnerships for their future careers. The Fellowships of up to 5000\$ each can be used for any field of ridge-crest research.



IR Fellowships

Name	Call	Fellowship	Sum [€]	Nationality	Origin country	Hosting country	Sum	Paid in
Seyedeh Elnaz Naghibi	1/2017	IR-ISA	4250	Iranian	UK	US	12750	2017
Egidio Marino		IR	4250	IT	ES	DE/PT		2017
Surya Prakash		IR-ISA	4250	IN	IN	US		2017
Inmaculada Frutos	2/2017	IR	4250	ES	DE	FR/PL	10200	2018
Guangyu Xu		IR	4250	CN	US	CN		2018
Julia Machon		IR	1700	FR	FR	DE		2018
Simone Pujatti	2018	IR	4250	IT	CA	NL	17000	2019
Loes van Dam		IR	4250	NL	US	NO		2019
Srinivas Rao Arvapalli		IR	4250	IN	IN	FR		2019
Unyime Umoh		IR-ISA	4250	NI	CN	UK		2018
Jakub Ciężela	2019	IR	4250	PL	US	JP	8500	2019
Guilherme Weber Sampaio de Melo		IR	4250	BR	BR	US		2019
Total			48450					

InterRidge actions for early-career scientists:

InterRidge Cruise Bursaries awarded for travel and subsistence costs to encourage new collaborations across the InterRidge member nations and to enable early-career scientists to participate in mid-ocean ridge research cruises (up to 2 000 US\$ for travel costs to join the cruise). Applicants should have a clear role on the research cruise and not be part of the original research team.

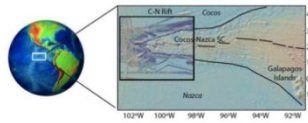


Cocos Nazca Rift Cruise
20 April – 26 th May 2018
R/V Sally Ride

Elvira Latypova,
Saint Petersburg State University, Russia
elatlypova@yandex.ru

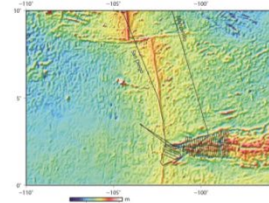


Science party in front of the R/V Sally Ride.



Map of the Galapagos Triple Junction (GTJ) region

A fundamental question in the study of mid-ocean ridges focuses on how spreading centers initiate and evolve in different settings [e.g., Bonatti, 1985; Lonsdale, 1989; Monaghan et al., 1997; Taylor et al., 1995; Van Wijk and Blackmon, 2005]. A related question is how the dominant style of tectonic segmentation observed along a particular ridge is established, and its relationship to the initial rifting configuration [e.g., Augustin et al., 2014; Bonatti, 1985; Laj et al., 2012; Schouten et al., 1985; Taylor et al., 1995]. While most rift-to-drift studies focus on rifting of continental lithosphere, the Galapagos Triple Junction (GTJ) region offers an opportunity to examine these questions in an oceanic setting, which may serve as a complement to studies of continental rifting. Previous studies have explored divergence and initial rifting in continental environments such as the East African rift. But there are few places along the mid-ocean ridge system where one can explore various stages of divergence from initial rifting through full seafloor spreading. The Cocos-



IR Cruise Bursaries

Nb	Name	From	Date of cruise	Cruise ID	To	Sum [€]	Paid in
1	Alexander Diehl	DE	6-26/03/2018	TN350	Brothers Volcanc	1700	2017
2	Zhongwei Zhao	GB	24/08-11/09/2018	PLATMAR2	Santa-Maria Azores	1700	2018
3	Dominik Zawadzki	PL	20/04-26/05/2018	Cocos-Nazca Rift Cruise	Cocos-Nazca Rift	1700	2018
4	Elvira Latypova	RU	20/04-26/05/2018	Cocos-Nazca Rift Cruise	Cocos-Nazca Rift	1700	2018
5	Thomas Giguère	CA	1-30/06/2018	SO293	Northern Tonga island arc and NE Lau Back-Arc Basin	1700	2018
6	Nicole Morgan	US	27/01-3/03/2019	MR18-06-03	Nazca Plate and Chile Ridge - East Pacific Ridge juncture	1700	2018
7	Gabriella Alodia	GB	19/02-31/03/2019	Marion Rise	South West Indian Ridge	1700	2019
8	Dominik Pałgan	PL	23/06-29/07/2019	AR35-04	Reykjanes Ridge flanks south of Iceland	1150	2019
					Total	13050	

InterRidge actions for early-career scientists

Support to ridge-related meetings & workshops :

- 6th International Symposium on Chemosynthesis-Based Ecosystems (CBE6) in Woods Hole, USA
- IR workshop on Oceanic Transform Faults
- SCOR - InterRidge Meeting on "Mid-Ocean Ridges and Other Geological Features of the Indian Ocean"
- Workshop "Advances in ocean observations – sustained system for deep-sea meroplankton" 27-29 May 2019 in Aveiro University (Portugal)

Nb	Last Name	First Name	University	Country	Student	[€]	Conference	Paid in
1	Gaytán-Caballero	Adriana	National Autonomous University of Mexico	Mexico	student		CBE6, Woods Hole, USA	2017
2	Franco	Diego	University of Sao Paulo	Brazil	student			
3	Remya	Tresa	CSIR-National Institute of Oceanography	India	student			
4	Pereira	Olivia	University of Sao Paulo	Brazil	student			
5	Huson	Bérengère	Ifremer	France	post-doc			
6	Hou	Jianlin	Shanghai Jiaotong University	China	student			
7	Machon	Julia	UPMC	France	student			
8	Piquet	Bérénice	Station Biologique de Roscoff	France	student			
9	Chapman	Abbie	University of Southampton	UK	student			
10	Boschen	Rachel	University of Victoria	Canada	post-doc			
11	Grosche	Ashley	Rutgers	USA	student			
12	Turner	Philip	Duke	USA	student			
13	Smedile	Francesco	Rutgers	USA	post-doc	4250		
14	Emily Roland Seanger			US		500	IR OTF, Brest, France	2018
15	Fan Zhang			CN		700		
16	Thomas Morrow			US		500		
17	Cécile Prigent			FR (US)		500		
18	Christopher Thomas Schmidt			DE		300		
19	Kirstin	Meyer-Kaiser	WHOI	USA	scientist	1800	workshop on observations and studies on deep-sea larvae in Aveiro on 27-31 May	2019
20	Anna	Metaxas	Dalhousie University	Canada	prof	1500		
						TOTAL	10050	

The ISA-InterRidge fellowships

- The ISA endowment fund has funded 14 trainees through the ISA-InterRidge fellowships. Rules and applications were similar to the InterRidge fellowships but trainees had to come from a developing country.
- Because the InterRidge Office moves every 3 years, I cannot tell much about the first fellowships.
- The three last fellowships were given to trainees from India, Iran, and Nigeria to visit US (2) and UK .
- The scheme allowed pursuing additional researches and developing contacts to early career scientists from developing countries.
- InterRidge is willing to continue it, should ISA have similar views.

Additional experiences on Capacity Building/Development

- Scientists all over the World supervise M.Sc. and Ph.D. students from developing countries
- By doing so, they contribute to the development of capacities in these countries.
- Some students do not return. Among those who do, some are not given the chance to use their new knowledge due to lack of means whereas some do get the right position.

A case story (1/2)

- Let me tell you my story with Dr. Dass Bissessur, from Mauritius, my former PhD student in Paris.
- In 1998 I led a cruise in the EEZ of Mauritius. We got observers but they were from different fields. I noted the lack of Marine Geoscientists in Mauritius.
- In 2000 I led another cruise in the EEZ of Mauritius. In the mean time the Mauritius Oceanography Institute (MOI) had been created and we had colleagues to interact with. But still no Marine Geoscientist.
- In 2006 we harboured in Port Louis, being unable to do so in Reunion due to Chikungunya outbreak there. We took the opportunity to invite the MOI members and officials from the French Embassy. We expressed the need of a Fellowship for a PhD in Marine Geoscience, granted by the Embassy a few months later.

A case story (2/2)

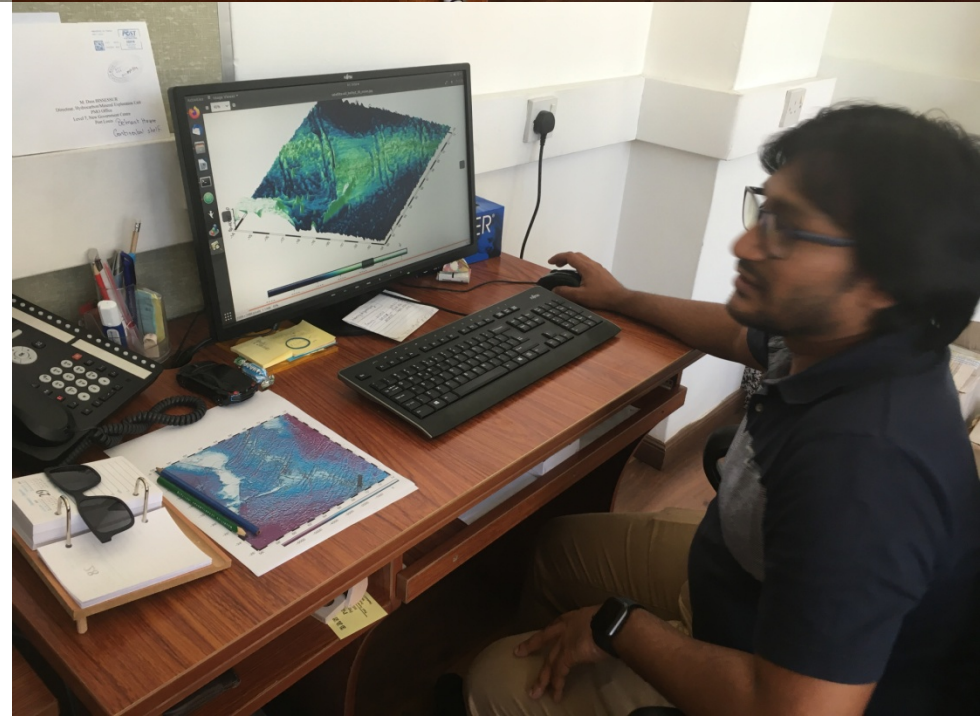
- Dass Bissessur defended his PhD in IPG Paris in 2011. He studied the evolution of the Mascarene Basin using a variety of methods.
- He returned to Mauritius to his position in MOI, where he tried to develop the Marine Geoscience lab.
- He later moved to the Department of Continental Shelf, Maritime Zones Administration and Exploration (under the Prime Minister Office of Mauritius)
- Last week we were working together with his colleagues in Port Louis on the Continental Shelf extension of Rodrigues Island.

**DEPARTMENT FOR CONTINENTAL SHELF,
MARITIME ZONES ADMINISTRATION
AND EXPLORATION**

DIRECTOR
Hydrocarbon / Mineral Exploration Unit



Dr. Dass Bissessur in his office
in Port Louis, Mauritius



A few words of conclusion

- We should not forget fundamental knowledge in our capacity building / development efforts
- Money is better spent when a project based on individual good will is clearly defined and offers good chance of successful implementation
- InterRidge has excellent returns from its Fellowship program in general – many laureates get position and become future researchers. Small often works well...